

Title (en)  
FLUID DELIVERY DEVICE

Title (de)  
FLUIDZUFUHRVORRICHTUNG

Title (fr)  
DISPOSITIF DE DISTRIBUTION DE FLUIDE

Publication  
**EP 1345840 A2 20030924 (EN)**

Application  
**EP 01987120 A 20011130**

Priority  
• US 0144570 W 20011130  
• US 25090300 P 20001202

Abstract (en)  
[origin: WO0244075A2] A fluid heating and dispensing device and method of using the device, is provided. The device has a first reservoir, a second reservoir, a pump device, a heating device, and a delivery device. The first reservoir is in thermal communication with the heating device, the second reservoir is in substantial thermal isolation from the heating device, the first reservoir is substantially smaller than the second reservoir and the pump device selectively causes fluid to flow between the reservoirs and to the atmosphere. The device can have a removable supply container for refilling.  
[origin: WO0244075A2] A fluid heating and dispensing device and method of using the device, the device having a first reservoir (50), a second reservoir (40), a pump (22), a heating device (54), and a delivery device (20). The first reservoir is in thermal communication with the heating device, the second reservoir is thermally isolated from the heating device. The first reservoir is substantially smaller than the second reservoir and the pump device selectively caused fluid to flow between the reservoirs and the atmosphere.

IPC 1-7  
**B67D 1/00**; **A45D 34/00**; **B05B 9/00**; **B05B 9/08**; **B05B 11/00**

IPC 8 full level  
**F04B 9/14** (2006.01); **A45D 34/00** (2006.01); **A45D 40/00** (2006.01); **A45D 44/02** (2006.01); **B05B 9/00** (2006.01); **B05B 9/08** (2006.01); **B05B 11/00** (2006.01); **B65D 47/34** (2006.01); **F04B 9/00** (2006.01)

CPC (source: EP KR US)  
**A45D 34/00** (2013.01 - EP US); **A45D 40/00** (2013.01 - EP US); **A45D 44/02** (2013.01 - EP US); **B05B 9/002** (2013.01 - EP US); **B05B 9/0861** (2013.01 - EP US); **B05B 11/0002** (2013.01 - EP US); **B05B 11/1015** (2013.01 - EP US); **B65D 47/00** (2013.01 - KR); **Y10T 137/0318** (2015.04 - EP US); **Y10T 137/6606** (2015.04 - EP US)

Cited by  
US9974416B2; US9801505B2; US10144032B2; US10433372B2; US10189038B2; US10098510B2

Designated contracting state (EPC)  
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**WO 0244075 A2 20020606**; **WO 0244075 A3 20030213**; **WO 0244075 A9 20040408**; **WO 0244075 B1 20030515**; AU 3936702 A 20020611; CA 2430704 A1 20020606; CN 1486412 A 20040331; EP 1345840 A2 20030924; EP 1345840 A4 20050302; JP 2004534916 A 20041118; KR 20030070902 A 20030902; NO 20032480 D0 20030602; NO 20032480 L 20030718; RU 2003119555 A 20041010; US 2002108965 A1 20020815; US 2009038685 A1 20090212

DOCDB simple family (application)  
**US 0144570 W 20011130**; AU 3936702 A 20011130; CA 2430704 A 20011130; CN 01822066 A 20011130; EP 01987120 A 20011130; JP 2002546025 A 20011130; KR 20037007382 A 20030602; NO 20032480 A 20030602; RU 2003119555 A 20011130; US 19345608 A 20080818; US 99801501 A 20011130